

# Statement of Basis of the Federal Operating Permit

Ascend Performance Materials Texas Inc.

Site/Area Name: Formalin  
Physical location: FM 2917  
Nearest City: Alvin  
County: Brazoria

Permit Number: O2322  
Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2869  
SIC Name: Industrial Organic Chemicals

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document may include the following information:

- A description of the facility/area process description;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- The rationale for compliance assurance methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: December 16, 2014

## Operating Permit Basis of Determination

### Permit Area Process Description

Formalin is produced from air and methanol by a proprietary, Monsanto developed catalytic reaction process. Processing is continuous and automatically controlled.

Products from the reaction step are processed to recover unreacted methanol for recycle, and to refine the crude formalin. Product formalin is collected into on-site storage tanks. Product is transferred by pipeline to on-site users. Product is also loaded into rail cars and tank trucks for shipment to customers.

### FOPs at Site

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1258, O1287, O2260, O2261, O2318, O2321, O2323, O2324, O2325

### Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, NOX, HAPS, CO
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### Reading State of Texas’s Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements
  - Protection of Stratosphere Ozone
  - Permit Location
  - Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary

- Applicable Requirements Summary
  - Additional Monitoring Requirements
  - Permit Shield
  - New Source Review Authorization References
  - Compliance Plan
  - Alternative Requirements
- Appendix A
  - Acronym list

## General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

## Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on an OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

## Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow

rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

**Permit Shield.** A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

**New Source Review Authorization References.** All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

**Compliance Plan.** A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

**Alternative Requirements.** This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

## Appendix A

**Acronym list.** This attachment lists the common acronyms used when discussing the FOPs.

### **Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions**

The site contains stationary vents with a flow rate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

### **Federal Regulatory Applicability Determinations**

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

<b>Regulatory Program</b>	<b>Applicability (Yes/No)</b>
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

### **Basis for Applying Permit Shields**

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

## Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feed water) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

## Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [www.tceq.texas.gov/permitting/air/nav/air\\_all\\_ua\\_forms.html](http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html).

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [www.tceq.texas.gov/permitting/air/nav/air\\_supportsys.html](http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html). The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

### Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

## Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination *
57T20	40 CFR Part 63, Subpart G	63G-T20	<p>Process Wastewater = The tank does not receive, manage, or treat process wastewater streams</p> <p>Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged.</p> <p>Meets 40 CFR 63.139(d) = The tank does not meet the criteria of 40 CFR § 63.149(d) or the criteria in 40 CFR § 63.149(e)(2).</p> <p>Wastewater Tank Properties = Volume of the wastewater tank greater than or equal to 151m<sup>3</sup> and vapor pressure of liquid stored is less than 5.2 kPa</p> <p>Sparged = The tank is not sparged or used for heating or treating by means of an exothermic reaction.</p>
83T10	40 CFR Part 60, Subpart K	60K-T10	Construction/Modification Date = On or before June 11, 1973
83T10	40 CFR Part 60, Subpart Kb	60KB-T10	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)</p>
83T10	40 CFR Part 63, Subpart G	63G-T10	<p>Process Wastewater = The tank does not receive, manage, or treat process wastewater streams</p> <p>Wastewater Tank Usage = The wastewater tank is not used for heating wastewater, treating by means of an exothermic reaction, nor are the contents of the tank are sparged.</p> <p>Meets 40 CFR 63.139(d) = The tank does not meet the criteria of 40 CFR § 63.149(d) or the criteria in 40 CFR § 63.149(e)(2).</p> <p>Wastewater Tank Properties = Volume of the wastewater tank greater than or equal to 151m<sup>3</sup> and vapor pressure of liquid stored is less than 5.2 kPa</p> <p>Sparged = The tank is not sparged or used for heating or treating by means of an exothermic reaction.</p>
83T11	30 TAC Chapter 115, Storage of VOCs	R5112-TT	<p>Construction Date = Before May 12, 1973</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is less than or equal to 1,000 gallons</p>
83T11	40 CFR Part 60, Subpart K	60K-T11	Construction/Modification Date = On or before June 11, 1973
83T11	40 CFR Part 60, Subpart Kb	60KB-T11	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)</p>
83T11	40 CFR Part 63, Subpart G	63G-T11	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
83T4	30 TAC Chapter 115, Storage of VOCs	R5112-T4	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a submerged fill pipe and vapor recovery system</p>



Unit ID	Regulation	Index Number	Basis of Determination*
			<p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p> <p>Control Device Type = Other control device</p> <p>Potential to Emit = Uncontrolled emissions from an individual storage tank, or from the aggregate of tanks in a tank battery, do not have the potential to equal or exceed 25 tons per year on a rolling 12-month basis.</p>
83T4	40 CFR Part 60, Subpart K	60K-51	Construction/Modification Date = On or before June 11, 1973
83T4	40 CFR Part 60, Subpart Kb	60KB-51	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia</p> <p>Storage Vessel Description = CVS and control device other than a flare (fixed roof)</p>
83T4	40 CFR Part 63, Subpart G	63G-50	<p>MACT Subpart F/G Applicability = The unit is a Group 2 vessel.</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>NSPS Subpart Kb Applicability = The unit is not subject to 40 CFR Part 60, Subpart Kb.</p>
83T8	30 TAC Chapter 115, Storage of VOCs	R5112-T8	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a submerged fill pipe and vapor recovery system</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p> <p>Control Device Type = Other control device</p> <p>Potential to Emit = Uncontrolled emissions from an individual storage tank, or from the aggregate of tanks in a tank battery, do not have the potential to equal or exceed 25 tons per year on a rolling 12-month basis.</p>
83T8	40 CFR Part 60, Subpart K	60K-52	Construction/Modification Date = On or before June 11, 1973
83T8	40 CFR Part 60, Subpart Kb	60KB-52	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia</p> <p>Storage Vessel Description = CVS and control device other than a flare (fixed roof)</p>
83T8	40 CFR Part 63, Subpart G	63G-51	<p>MACT Subpart F/G Applicability = The unit is a Group 1 vessel (as defined in Table 5 for existing sources or Table 6 for new sources of 40 CFR 63, Subpart G).</p> <p>Closed Vent System = Closed vent system is routing emissions to a process or fuel gas system, or is subject to § 63.148 of Subpart G</p> <p>NESHAP Subpart Y Applicability = The unit is not subject to 40 CFR Part 61, Subpart Y.</p> <p>Hard Piping = The closed vent system is constructed of hard piping.</p> <p>Bypass Lines = Closed vent system has no by-pass lines.</p> <p>Maximum TVP = Maximum true vapor pressure of the total organic HAP in the liquid is less than 11.11 psi (76.6 kPa)</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Control Device Type = Control device other than a flare, thermal incinerator, boiler, process heater, enclosed combustion device meeting residence time and temperature requirements, carbon adsorber, condenser or hazardous waste incinerator.</p> <p>Emission Control Type = Closed vent system (CVS) and control device (fixed roof)</p> <p>Control Device Design = The control device was installed on or before December 31, 1992 and was designed to reduce inlet emissions of total organic hazardous air pollutants by greater than or equal to 90% and less than 95%.</p> <p>Design Evaluation Submitted = A design evaluation of the emission control system was submitted to demonstrate compliance with 40 CFR § 63.119(e).</p>
83RC-LOAD/UNL	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-LOAD1	<p>Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system.</p> <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Loading and unloading.</p> <p>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.</p> <p>Daily Throughput = Loading less than 20,000 gallons per day.</p> <p>Control Options = Vapor control system that maintains a control efficiency of at least 90%.</p>
83RC-LOAD/UNL	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-LOAD2	<p>Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system.</p> <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Loading and unloading.</p> <p>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.</p> <p>Daily Throughput = Loading less than 20,000 gallons per day.</p> <p>Control Options = Vapor control system that maintains a control efficiency of at least 90%.</p>
83RC-LOAD/UNL	40 CFR Part 63, Subpart G	63G-LOAD1	<p>Alternate Parameter Monitoring = Approval has not been sought or has not been granted by the EPA Administrator to monitor a parameter other than those specified in 40 CFR § 63.127(a) - (b).</p> <p>Control Device = Absorber.</p> <p>Halogenated Emissions = There are no halogenated emission streams from the transfer rack.</p> <p>Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111).</p> <p>Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants.</p> <p>Emissions Routing = Emissions of organic hazardous air pollutants are not routed to a fuel gas system nor to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR § 63.126(b)(4)(i) - (iv).</p> <p>Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.</p> <p>Bypass Lines = The vent system does not contain by-pass lines that could divert a vent stream flow away from the control device.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Title 40 § 63.128(h) Option = The transfer rack is complying with 40 CFR § 63.128(a) or (b).</p> <p>Shared Control Device = The control device is not shared between transfer racks and process vents.</p> <p>Multiple Arms = Control device is not shared between multiple arms loading simultaneously.</p> <p>Intermittent = The vapor processing system is continuous.</p>
83RC-LOAD/UNL	40 CFR Part 63, Subpart G	63G-LOAD2	<p>Alternate Parameter Monitoring = Approval has not been sought or has not been granted by the EPA Administrator to monitor a parameter other than those specified in 40 CFR § 63.127(a) - (b).</p> <p>Control Device = Absorber.</p> <p>Halogenated Emissions = There are no halogenated emission streams from the transfer rack.</p> <p>Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111).</p> <p>Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants.</p> <p>Emissions Routing = Emissions of organic hazardous air pollutants are not routed to a fuel gas system nor to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR § 63.126(b)(4)(i) - (iv).</p> <p>Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.</p> <p>Bypass Lines = The vent system does not contain by-pass lines that could divert a vent stream flow away from the control device.</p> <p>Title 40 § 63.128(h) Option = The transfer rack is complying with 40 CFR § 63.128(a) or (b).</p> <p>Shared Control Device = The control device is not shared between transfer racks and process vents.</p> <p>Multiple Arms = Control device is not shared between multiple arms loading simultaneously.</p> <p>Intermittent = The vapor processing system is continuous.</p>
83TRK-LOAD/UNL	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-3	<p>Chapter 115 Control Device Type = Control device other than a flare, vapor combustor, catalytic incinerator, direct flame incinerator, chiller, or carbon adsorption system.</p> <p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Vapor Tight = All liquid and vapor lines are equipped with fittings which make vapor-tight connections that close automatically when disconnected.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Loading and unloading.</p> <p>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.</p> <p>Daily Throughput = Loading less than 20,000 gallons per day.</p> <p>Control Options = Vapor control system that maintains a control efficiency of at least 90%.</p>
83TRK-LOAD/UNL	40 CFR Part 63, Subpart G	63G-53	<p>Alternate Parameter Monitoring = Approval has not been sought or has not been granted by the EPA Administrator to monitor a parameter other than those specified in 40 CFR § 63.127(a) - (b).</p> <p>Control Device = Absorber.</p> <p>Halogenated Emissions = There are no halogenated emission streams from the transfer rack.</p> <p>Transfer Rack Type = Group 2 transfer rack (as defined in 40 CFR § 63.111).</p> <p>Vapor Balancing System = A vapor balancing system is not being used to reduce emissions of organic hazardous air pollutants.</p> <p>Emissions Routing = Emissions of organic hazardous air pollutants are not routed to a fuel gas system nor to a process where the organic hazardous air pollutants meet one or more of the ends specified in 40 CFR § 63.126(b)(4)(i) - (iv).</p> <p>Subject to Subpart BB = The transfer rack is not subject to 40 CFR Part 61, Subpart BB.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Bypass Lines = The vent system does not contain by-pass lines that could divert a vent stream flow away from the control device.</p> <p>Emission Rate = The vent stream halogen atom mass emission rate is being reduced to less than 0.45 kilograms per hour prior to any combustion control device.</p> <p>Performance Test Exemption = Boiler, process heater or incinerator does not qualify for exemption and a performance test is required.</p> <p>Title 40 § 63.128(h) Option = The transfer rack transfers less than 11.8 million liters per year and is complying with the requirements in 40 CFR § 63.128(h) instead of the requirements in 40 CFR § 63.128(a) or (b).</p> <p>Flow Indicator = The by-pass line valve is secured with a carseal or lock-and-key configuration.</p> <p>Other Emissions = The transfer rack receives emissions only from transfer racks subject to 40 CFR Part 63, Subpart G.</p> <p>Shared Control Device = The control device is not shared between transfer racks and process vents.</p> <p>Enclosed Combustion Device = An enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760 °C is not used to meet the 98 percent emission reduction requirement.</p> <p>Multiple Arms = Control device is not shared between multiple arms loading simultaneously.</p> <p>Intermittent = The vapor processing system is intermittent.</p> <p>Thermal Incinerator = Thermal incinerator is not used.</p>
83FUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5352	<p>Compressor Seals = The fugitive unit does not contain compressor seals.</p> <p>Flanges = The fugitive unit contains flanges.</p> <p>Open-ended Valves = The fugitive unit does not contain open-ended valves.</p> <p>Pressure Relief Valves = The fugitive unit contains pressure relief valves.</p> <p>Process Drains = The fugitive unit has process drains.</p> <p>Pump Seals = The fugitive unit contains pump seals.</p> <p>Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks.</p> <p>Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10.</p> <p>Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and documenting continuous compliance with an alternate control requirement or exemption criteria for process drains or no alternate has been requested.</p> <p>Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.</p> <p>Weight Percent VOC = All components contact a process fluid that contains greater than or equal to 10% VOC by weight.</p> <p>Complying with § 115.352(1) = Valves are complying with § 115.352(1).</p> <p>Complying With § 115.352(1) = Pressure relief valves are complying with § 115.352(1).</p> <p>Complying with 30 TAC § 115.352(1) = Flanges are complying with the requirements in 30 TAC § 115.352(1).</p> <p>Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations.</p> <p>Shaft Seal System = Pump seals are equipped with a shaft seal system that prevents or detects emission of VOC from the seal.</p> <p>TVP of Process Fluid VOC &lt;= 0.044 psia at 68° F = Pressure relief valves contact a process fluid with a TVP of less than or equal to 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC &lt;= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>TVP of Process Fluid VOC &lt;= 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p> <p>Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1).</p> <p>TVP of Process Fluid VOC &gt; 0.044 psia at 68° F = Valves contact a process fluid with a TVP greater than 0.044 psia at 68° F.</p> <p>TVP of Process Fluid VOC &gt; 0.044 PSIA AT 68° F = Flanges contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.</p>
83FUG	40 CFR Part 63, Subpart H	63G-1	<p>ANY (CLOSED VENT SYSTEMS) = COMPONENT NOT PRESENT</p> <p>ANY (OPEN-ENDED VALVES OR LINES) = COMPONENT PRESENT</p> <p>ENCLOSED-VENTED PROCESS UNIT AMEL = UNIT DOES NOT CONTAIN A TOTALLY ENCLOSED VENTED PROCESS UNIT COMPLYING WITH AN ALTERNATE MEANS OF EMISSION LIMITATION IN § 63.179</p> <p>EQUIPMENT TYPE = FUGITIVE UNIT CONTAINS EQUIPMENT LISTED IN 40 CFR § 63.160(A) WHICH IS OPERATED IN ORGANIC HAZARDOUS AIR POLLUTANT SERVICE</p> <p>GAS/VAPOR OR LIGHT LIQUID SERVICE (AGITATORS) = COMPONENT PRESENT</p> <p>LIGHT LIQUID SERVICE (PUMPS) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE (AGITATORS) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (OPEN-ENDED VALVES OR LINES) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (PUMPS) = COMPONENT NOT PRESENT</p> <p>NON RESEARCH AND DEVELOPMENT/BATCH PROCESSES = FUGITIVE UNIT CONTAINS PROCESSES OTHER THAN RESEARCH AND DEVELOPMENT FACILITIES AND BENCH-SCALE BATCH PROCESSES</p> <p>ANY (INSTRUMENTATION SYSTEMS) = COMPONENT PRESENT</p> <p>BATCH PROCESS AMEL = UNIT DOES NOT CONTAIN A BATCH PROCESS UNIT COMPLYING WITH AN ALTERNATE MEANS OF EMISSION LIMITATION IN § 63.178</p> <p>GAS/VAPOR OR LIGHT LIQUID SERVICE (VALVES) = COMPONENT PRESENT</p> <p>QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR PUMPS</p> <p>VACUUM SERVICE = NOT ALL OF THE EQUIPMENT IN THE FUGITIVE UNIT IS IN VACUUM SERVICE</p> <p>ANY (COMPRESSORS) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (INSTRUMENTATION SYSTEMS) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (VALVES) = COMPONENT NOT PRESENT</p> <p>LESS THAN 300 OPERATING HOURS = THE FUGITIVE UNIT CONTAINS ANY EQUIPMENT IN ORGANIC HAZARDOUS AIR POLLUTANT (HAP) SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR</p> <p>ANY (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT PRESENT</p> <p>GAS VAPOR SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE = NONE OF THE EQUIPMENT IN ORGANIC HAP SERVICE THAT IS INTENDED TO OPERATE LESS THAN 300 HOURS PER CALENDAR YEAR IS IN HEAVY LIQUID SERVICE</p> <p>QIP = UNIT DOES NOT OPT TO COMPLY WITH A QUALITY IMPROVEMENT PROGRAM FOR VALVES</p> <p>AMEL = FUGITIVE UNIT SOURCE OWNER/OPERATOR IS NOT ELECTING TO COMPLY WITH AN ALTERNATIVE MEANS OF EMISSION LIMITATION (AMEL)</p> <p>GAS/VAPOR OR LIGHT LIQUID SERVICE (CONNECTORS) = COMPONENT PRESENT</p> <p>GENERAL AMEL = UNIT IS NOT COMPLYING WITH AN ALTERNATE MEANS OF EMISSION LIMITATION UNDER § 63.177</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>HEAVY LIQUID SERVICE (SURGE CONTROL VESSELS OR BOTTOMS RECEIVERS) = COMPONENT NOT PRESENT</p> <p>LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (CONNECTORS) = COMPONENT NOT PRESENT</p> <p>HEAVY LIQUID SERVICE (PRESSURE RELIEF DEVICES) = COMPONENT NOT PRESENT</p> <p>ANY (SAMPLING CONNECTION SYSTEMS) = COMPONENT PRESENT</p> <p>HEAVY LIQUID SERVICE (SAMPLING CONNECTION SYSTEMS) = COMPONENT NOT PRESENT</p> <p>UNITS WITHOUT AMEL = ALL FUGITIVE UNIT EQUIPMENT OR PROCESS UNITS ARE COMPLYING WITH AN ALTERNATE MEANS OF EMISSION LIMITATION.</p>
83AIROX	30 TAC Chapter 115, Vent Gas Controls	616	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).</p> <p>Vent Type = Vent gas stream is emitted from an air oxidation synthetic organic chemical manufacturing process.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.</p>
83AIROX	40 CFR Part 63, Subpart G	63G-55	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Thermal incinerator.</p> <p>Overlap = Title 40 CFR Part 60, Subpart III</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>Regulation = The process vent is subject to the provisions of 40 CFR Part 60, Subpart III and 40 CFR Part 63, Subpart G and the owner or operator is electing to comply only with the requirements of 40 CFR Part 63, Subpart G.</p> <p>HAP Concentration = HAP concentration is greater than or equal to 50 ppm.</p> <p>TRE for Halogenated Vent Stream = The total resource effectiveness (TRE) index value is not being calculated for a halogenated vent stream.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p> <p>Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate.</p> <p>Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.</p>
83AIROX	40 CFR Part 63, Subpart G	63G-55a	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Thermal incinerator.</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>Regulation = The process vent is subject to the provisions of 40 CFR Part 60, Subpart NNN and 40 CFR Part 63, Subpart G, and the owner or operator is electing to comply only with the requirements of 40 CFR Part 63, Subpart G.</p> <p>HAP Concentration = HAP concentration is greater than or equal to 50 ppm.</p> <p>TRE for Halogenated Vent Stream = The total resource effectiveness (TRE) index value is not being calculated for a halogenated vent stream.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p> <p>Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate.</p> <p>Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.</p>
83AIROX	40 CFR Part 63, Subpart G	63G-55b	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Thermal incinerator.</p> <p>Overlap = Title 40 CFR Part 60, Subpart RRR</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>Regulation = The process vent is subject to the provisions of 40 CFR Part 60, Subpart RRR and 40 CFR Part 63, Subpart G, and the owner or operator is electing to comply only with the requirements of 40 CFR Part 63, Subpart G.</p> <p>HAP Concentration = HAP concentration is greater than or equal to 50 ppm.</p> <p>TRE for Halogenated Vent Stream = The total resource effectiveness (TRE) index value is not being calculated for a halogenated vent stream.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p> <p>Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate.</p> <p>Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.</p>
83AIROXA	30 TAC Chapter 115, Vent Gas Controls	618	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas stream is emitted from an air oxidation synthetic organic chemical manufacturing process.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration = VOC concentration is greater than or equal to 612 ppmv.</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.</p>
83AIROXA	40 CFR Part 63,	63G-15A	Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters

Unit ID	Regulation	Index Number	Basis of Determination*
	Subpart G		<p>are not used.</p> <p>Control Device = Absorber used as a recapture device.</p> <p>Overlap = Title 40 CFR Part 60, Subpart III</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>Regulation = The process vent is subject to the provisions of 40 CFR Part 60, Subpart III and 40 CFR Part 63, Subpart G and the owner or operator is electing to comply only with the requirements of 40 CFR Part 63, Subpart G.</p> <p>HAP Concentration = HAP concentration is greater than or equal to 50 ppm.</p> <p>TRE for Halogenated Vent Stream = The total resource effectiveness (TRE) index value is not being calculated for a halogenated vent stream.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p> <p>Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate.</p> <p>Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.</p>
83AIROXA	40 CFR Part 63, Subpart G	63G-15B	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Absorber used as a recapture device.</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>Regulation = The process vent is subject to the provisions of 40 CFR Part 60, Subpart NNN and 40 CFR Part 63, Subpart G, and the owner or operator is electing to comply only with the requirements of 40 CFR Part 63, Subpart G.</p> <p>HAP Concentration = HAP concentration is greater than or equal to 50 ppm.</p> <p>TRE for Halogenated Vent Stream = The total resource effectiveness (TRE) index value is not being calculated for a halogenated vent stream.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p> <p>Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate.</p> <p>Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.</p>
83AIROXA	40 CFR Part 63, Subpart G	63G-15C	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Absorber used as a recapture device.</p> <p>Overlap = Title 40 CFR Part 60, Subpart RRR</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>Regulation = The process vent is subject to the provisions of 40 CFR Part 60, Subpart RRR and 40 CFR Part 63, Subpart G, and the owner or operator is electing to comply only with the requirements of 40 CFR Part 63, Subpart G.</p> <p>HAP Concentration = HAP concentration is greater than or equal to 50 ppm.</p>



Unit ID	Regulation	Index Number	Basis of Determination*
			<p>TRE for Halogenated Vent Stream = The total resource effectiveness (TRE) index value is not being calculated for a halogenated vent stream.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p> <p>Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate.</p> <p>Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.</p>
83D1	30 TAC Chapter 115, Vent Gas Controls	R5121-D1A	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration = VOC concentration is less than 612 ppmv.</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.</p>
83D1	30 TAC Chapter 115, Vent Gas Controls	R5121-D1B	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration = VOC concentration is less than 612 ppmv.</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.</p>
83D1	40 CFR Part 63, Subpart G	63G-D1A	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Thermal incinerator.</p> <p>Overlap = Title 40 CFR Part 60, Subpart NNN</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>Regulation = The process vent is subject to the provisions of 40 CFR Part 60, Subpart NNN and 40 CFR Part 63, Subpart G, and the owner or</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>operator is electing to comply only with the requirements of 40 CFR Part 63, Subpart G.</p> <p>HAP Concentration = HAP concentration is greater than or equal to 50 ppm.</p> <p>TRE for Halogenated Vent Stream = The total resource effectiveness (TRE) index value is not being calculated for a halogenated vent stream.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p> <p>Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate.</p> <p>Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.</p>
83D1	40 CFR Part 63, Subpart G	63G-D1B	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Absorber used as a recapture device.</p> <p>Overlap = Title 40 CFR Part 60, Subpart NNN</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>Regulation = The process vent is subject to the provisions of 40 CFR Part 60, Subpart NNN and 40 CFR Part 63, Subpart G, and the owner or operator is electing to comply only with the requirements of 40 CFR Part 63, Subpart G.</p> <p>HAP Concentration = HAP concentration is greater than or equal to 50 ppm.</p> <p>TRE for Halogenated Vent Stream = The total resource effectiveness (TRE) index value is not being calculated for a halogenated vent stream.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p> <p>Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate.</p> <p>Performance Test = No previous performance test was conducted.</p>
83PURE	30 TAC Chapter 115, Vent Gas Controls	R5121	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p> <p>Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration = VOC concentration is less than 612 ppmv.</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.</p>
83PURE	30 TAC Chapter 115, Vent Gas Controls	R5121a	<p>Alternate Control Requirement = Alternate control is not used.</p> <p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.</p> <p>Vent Type = Vent gas stream originates from a synthetic organic chemical manufacturing industry reactor process or distillation operation, as defined in 30 TAC § 115.10.</p> <p>Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg).</p> <p>VOC Concentration = VOC concentration is less than 612 ppmv.</p> <p>VOC Concentration/Emission Rate @ Max Operating Conditions = Either the VOC concentration or emission rate is greater than the applicable exemption limit at maximum actual operating conditions or the alternate recordkeeping requirements of 30 TAC § 115.126(4) are not being selected.</p>
83PURE	40 CFR Part 63, Subpart G	63G-56	<p>Alternate Monitoring Parameters = The EPA Administrator has not approved alternate monitoring parameters or alternate monitoring parameters are not used.</p> <p>Control Device = Thermal incinerator.</p> <p>Overlap = Title 40 CFR Part 60, Subpart NNN</p> <p>Group 1 = The process vent meets the definition of a Group 1 process vent.</p> <p>Continuous Monitoring = Complying with the continuous monitoring requirements of 40 CFR §§ 63.114, 63.117, and 63.118.</p> <p>Halogenated = Vent stream is not halogenated.</p> <p>Regulation = The process vent is subject to the provisions of 40 CFR Part 60, Subpart NNN and 40 CFR Part 63, Subpart G, and the owner or operator is electing to comply only with the requirements of 40 CFR Part 63, Subpart G.</p> <p>HAP Concentration = HAP concentration is greater than or equal to 50 ppm.</p> <p>TRE for Halogenated Vent Stream = The total resource effectiveness (TRE) index value is not being calculated for a halogenated vent stream.</p> <p>By-pass Lines = The vent system does not contain by-pass lines that can divert the vent stream from the control device.</p> <p>Flow Rate = Flow rate is greater than or equal to 0.005 scm/min or the owner or operator is not electing to demonstrate this flow rate.</p> <p>Performance Test = A performance test was conducted for determining compliance with a regulation promulgated by the EPA using the same methods specified in Subpart G and either no process changes have been made, or the results reliably indicate compliance.</p>
83PURE	40 CFR Part 60, Subpart NNN	60NNN-6	<p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p> <p>Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.</p> <p>Subpart NNN Control Device = Thermal incinerator.</p> <p>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = 1 gigagram per year or greater.</p> <p>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.</p> <p>Organic Monitoring Device = A recovery device specific monitoring device is used to demonstrate compliance with the TRE index value limit of § 60.662(c).</p>
83PURE	40 CFR Part 60, Subpart NNN	60NNN-6a	<p>Subpart NNN Chemicals = The distillation unit produces any chemical listed in 40 CFR § 60.667 as a product, co-product, by-product, or intermediate.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Total Resource Effectiveness = TRE index value less than 8.0 not from a halogenated vent stream.</p> <p>Construction/Modification Date = After December 30, 1983.</p> <p>TOC Reduction = Compliance is achieved by reducing total organic compound emissions (less methane and ethane) by 98 weight-percent or to a concentration of 20 ppmv dry basis corrected to 3 percent oxygen using a VOC emissions non-flare combustion control device.</p> <p>Subpart NNN Control Device = Absorber.</p> <p>Vent Type = Distillation unit not discharging vent stream into a vapor recovery system.</p> <p>Distillation Unit Type = Does not qualify for any exemption under § 60.660(c)(1)-(3).</p> <p>Total Design Capacity = 1 gigagram per year or greater.</p> <p>Vent Stream Flow Rate = Flow rate greater than or equal to 0.008 scm/min.</p> <p>Organic Monitoring Device = A recovery device specific monitoring device is used to demonstrate compliance with the TRE index value limit of § 60.662(c).</p>
83AIROX	40 CFR Part 60, Subpart III	60III	<p>Construction/Modification Date = After October 21, 1983.</p> <p>Affected Facility = Air oxidation reactor not discharging its vent stream into a recovery system.</p> <p>TRE Index Value = TRE index value is not calculated or claimed for exemption in 40 CFR § 60.610(c).</p> <p>Control Device = Non-catalytic incinerator is used to comply with TOC emission limits.</p>
83AIROX	40 CFR Part 60, Subpart RRR	60RRR	<p>Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Construction/Modification Date = On or before June 29, 1990.</p>
83AIROXA	40 CFR Part 60, Subpart III	60III-A	<p>Construction/Modification Date = After October 21, 1983.</p> <p>Affected Facility = Air oxidation reactor not discharging its vent stream into a recovery system.</p> <p>TRE Index Value = TRE index value is not calculated or claimed for exemption in 40 CFR § 60.610(c).</p> <p>Control Device = Compliance demonstration with control devices other than an incinerator, boiler, process heater, or flare has been approved by the EPA Administrator.</p>
83AIROXA	40 CFR Part 60, Subpart RRR	60RRR-A	<p>Chemicals Listed in 40 CFR § 60.707 = The affected facility is part of a process unit that produces chemicals listed in 40 CFR § 60.707 as a product, co-product, by product, or intermediate.</p> <p>Construction/Modification Date = On or before June 29, 1990.</p>
83CMPU	40 CFR Part 63, Subpart F	63F-7	<p>Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).</p> <p>Intervening Cooling Fluid = There is no intervening cooling fluid containing less than 5 percent by weight of total HAPs listed in Table 4 of 40 CFR Part 63, Subpart F, between the process and cooling water.</p> <p>Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.</p> <p>Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.</p> <p>NPDES Permit = The once-through heat exchange system is not subject to NPDES permit with an allowable discharge limit of 1 part per million or less above influent concentration or 10 percent or less above influent concentration.</p> <p>Meets 40 CFR 63.104(a)(4)(i)-(iv) = The once-through heat exchange system is not subject to an NPDES permit that meets 40 CFR § 63.104(a)(4)(i) - (iv).</p> <p>Heat Exchange System = A heat exchange system is utilized.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>Table 9 HAP Content = The once-through heat exchange system is used exclusively to cool process fluids that contain less than 5 percent by weight of total HAPs listed in Table 9 of 40 CFR Part 63, Subpart G.</p> <p>Cooling Water Monitored = The cooling water is being monitored for the presence of one or more HAPs or other representative substances whose presence in cooling water indicates a leak.</p> <p>Cooling Water Pressure = The heat exchange system is operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.</p>
GRPHX	40 CFR Part 63, Subpart F	63F	<p>Applicable Chemicals = The chemical manufacturing process unit manufactures, as a primary product, one or more of the chemicals listed in 40 CFR § 63.100(b)(1)(i) or 40 CFR § 63.100(b)(1)(ii).</p> <p>Table 2 HAP = The chemical manufacturing process unit uses as a reactant or manufactures, as a product or co-product, one or more of the organic hazardous air pollutants in Table 2.</p> <p>Alternate Means of Emission Limitation = No alternative means of emission limitation has been approved by the EPA Administrator to achieve a reduction in organic HAP emission or no alternate has been requested.</p> <p>Heat Exchange System = A heat exchange system is utilized.</p> <p>Cooling Water Pressure = The heat exchange system is operated with the minimum pressure on the cooling water side at least 35 kilopascals greater than the maximum pressure on the process side.</p>

\* - The “unit attributes” or operating conditions that determine what requirements apply

## NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

## New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[www.tceq.texas.gov/permitting/air/permitbyrule/historical\\_rules/old106list/index106.html](http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html)

Outdated Standard Exemption lists may be viewed at the following Web site:

[www.tceq.texas.gov/permitting/air/permitbyrule/historical\\_rules/oldselist/se\\_index.html](http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html)

<b>Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.</b>	
Authorization No.: 32151	Issuance Date: 08/18/2011
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.371	Version No./Date: 03/14/1997
Number: 106.472	Version No./Date: 09/04/2000

## Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sandblasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

## Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

## **Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected**

### **Compliance Assurance Monitoring (CAM):**

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;
2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and
3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:



Unit/Group/Process Information	
ID No.: 83D1	
Control Device ID No.: 83S14	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-D1B
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Flow rate	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: Minimum flow rate of 9.5 gpm when vent receiving vent gases	
<p>Basis of CAM: These indicators are identified as the primary determinants of product recovery device operations. The key to control efficiency for an absorber is good contact between the exhaust gas and the absorbing liquid. Monitoring liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles. Monitoring specific gravity and liquid VOC concentration is appropriate for direct absorption to indicate absorbing liquid saturation. Also monitoring liquid VOC concentration can indicate whether or not the absorbing liquid is actually absorbing the VOC, which can indicate that the control device is working properly. Monitoring outlet gas temperature can indicate the amount of VOC from the gas stream that can be absorbed by the scrubbing liquid. As the temperature increases the vapor pressure and energy level of the gas stream increases, raising the energy level of the absorbed molecules. At higher energy levels the absorbed molecules may have sufficient energy to overcome the attraction of the absorbing liquid. Therefore, absorbing liquids capture more air contaminants at low temperatures. Temperature is a good indicator of proper operation of the absorber. Therefore, monitoring combinations of these indicators, such as: outlet gas temperature and liquid flow rate; outlet gas temperature and liquid supply pressure; outlet gas temperature and specific gravity; liquid flow rate and liquid VOC concentration; liquid supply pressure and liquid VOC concentration; liquid flow rate and gas flow rate and liquid VOC concentration; liquid flow rate and specific gravity; liquid supply pressure and specific gravity; and liquid flow rate and gas flow rate and specific gravity, will help identify any potential problems with the control device. Specifically monitoring the scrubbing liquid flow or supply pressure and temperature is commonly required by and consistent with the May 1995 TCEQ guidance entitled "New Source Review Technical Guidance Package for Chemical Sources - Absorption Units". Also monitoring indicators to measure absorbing liquid saturation is commonly required in federal rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR and 40 CFR Part 63, Subpart G.</p>	

\*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: 83D1	
Control Device ID No.: 83S14	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-D1B
Pollutant: VOC	Main Standard: § 115.121(a)(2)
Monitoring Information	
Indicator: Scrubber liquid temperature	
Minimum Frequency: once per day	
Averaging Period: n/a*	
Deviation Limit: Maximum temperature of 85 degrees F for the absorbing liquid shall be recorded once per day	
<p>Basis of CAM: These indicators are identified as the primary determinants of product recovery device operations. The key to control efficiency for an absorber is good contact between the exhaust gas and the absorbing liquid. Monitoring liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles. Monitoring specific gravity and liquid VOC concentration is appropriate for direct absorption to indicate absorbing liquid saturation. Also monitoring liquid VOC concentration can indicate whether or not the absorbing liquid is actually absorbing the VOC, which can indicate that the control device is working properly. Monitoring outlet gas temperature can indicate the amount of VOC from the gas stream that can be absorbed by the scrubbing liquid. As the temperature increases the vapor pressure and energy level of the gas stream increases, raising the energy level of the absorbed molecules. At higher energy levels the absorbed molecules may have sufficient energy to overcome the attraction of the absorbing liquid. Therefore, absorbing liquids capture more air contaminants at low temperatures. Temperature is a good indicator of proper operation of the absorber. Therefore, monitoring combinations of these indicators, such as: outlet gas temperature and liquid flow rate; outlet gas temperature and liquid supply pressure; outlet gas temperature and specific gravity; liquid flow rate and liquid VOC concentration; liquid supply pressure and liquid VOC concentration; liquid flow rate and gas flow rate and liquid VOC concentration; liquid flow rate and specific gravity; liquid supply pressure and specific gravity; and liquid flow rate and gas flow rate and specific gravity, will help identify any potential problems with the control device. Specifically monitoring the scrubbing liquid flow or supply pressure and temperature is commonly required by and consistent with the May 1995 TCEQ guidance entitled "New Source Review Technical Guidance Package for Chemical Sources - Absorption Units". Also monitoring indicators to measure absorbing liquid saturation is commonly required in federal rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR and 40 CFR Part 63, Subpart G.</p>	

\*The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

Unit/Group/Process Information	
ID No.: 83T4	
Control Device ID No.: 83S6	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-T4
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Flow rate.	
Minimum Frequency: Once per day.	
Averaging Period: n/a	
Deviation Limit: Minimum flow rate of 3.25 gpm when vent receiving vent gases.	
<p>Basis of CAM: These indicators are identified as the primary determinants of product recovery device operations. The key to control efficiency for an absorber is good contact between the exhaust gas and the absorbing liquid. Monitoring liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles. Monitoring specific gravity and liquid VOC concentration is appropriate for direct absorption to indicate absorbing liquid saturation. Also monitoring liquid VOC concentration can indicate whether or not the absorbing liquid is actually absorbing the VOC, which can indicate that the control device is working properly. Monitoring outlet gas temperature can indicate the amount of VOC from the gas stream that can be absorbed by the scrubbing liquid. As the temperature increases the vapor pressure and energy level of the gas stream increases, raising the energy level of the absorbed molecules. At higher energy levels the absorbed molecules may have sufficient energy to overcome the attraction of the absorbing liquid. Therefore, absorbing liquids capture more air contaminants at low temperatures. Temperature is a good indicator of proper operation of the absorber. Therefore, monitoring combinations of these indicators, such as: outlet gas temperature and liquid flow rate; outlet gas temperature and liquid supply pressure; outlet gas temperature and specific gravity; liquid flow rate and liquid VOC concentration; liquid supply pressure and liquid VOC concentration; liquid flow rate and gas flow rate and liquid VOC concentration; liquid flow rate and specific gravity; liquid supply pressure and specific gravity; and liquid flow rate and gas flow rate and specific gravity, will help identify any potential problems with the control device. Specifically monitoring the scrubbing liquid flow or supply pressure and temperature is commonly required by and consistent with the May 1995 TCEQ guidance entitled "New Source Review Technical Guidance Package for Chemical Sources - Absorption Units". Also monitoring indicators to measure absorbing liquid saturation is commonly required in federal rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR and 40 CFR Part 63, Subpart G.</p>	

Unit/Group/Process Information	
ID No.: 83T4	
Control Device ID No.: 83S6	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-T4
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Scrubber liquid temperature.	
Minimum Frequency: Once per day.	
Averaging Period: n/a	
Deviation Limit: Maximum temperature of 95°F for the absorbing liquid shall be recorded once per day.	
<p>Basis of CAM: These indicators are identified as the primary determinants of product recovery device operations. The key to control efficiency for an absorber is good contact between the exhaust gas and the absorbing liquid. Monitoring liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles. Monitoring specific gravity and liquid VOC concentration is appropriate for direct absorption to indicate absorbing liquid saturation. Also monitoring liquid VOC concentration can indicate whether or not the absorbing liquid is actually absorbing the VOC, which can indicate that the control device is working properly. Monitoring outlet gas temperature can indicate the amount of VOC from the gas stream that can be absorbed by the scrubbing liquid. As the temperature increases the vapor pressure and energy level of the gas stream increases, raising the energy level of the absorbed molecules. At higher energy levels the absorbed molecules may have sufficient energy to overcome the attraction of the absorbing liquid. Therefore, absorbing liquids capture more air contaminants at low temperatures. Temperature is a good indicator of proper operation of the absorber. Therefore, monitoring combinations of these indicators, such as: outlet gas temperature and liquid flow rate; outlet gas temperature and liquid supply pressure; outlet gas temperature and specific gravity; liquid flow rate and liquid VOC concentration; liquid supply pressure and liquid VOC concentration; liquid flow rate and gas flow rate and liquid VOC concentration; liquid flow rate and specific gravity; liquid supply pressure and specific gravity; and liquid flow rate and gas flow rate and specific gravity, will help identify any potential problems with the control device. Specifically monitoring the scrubbing liquid flow or supply pressure and temperature is commonly required by and consistent with the May 1995 TCEQ guidance entitled "New Source Review Technical Guidance Package for Chemical Sources - Absorption Units". Also monitoring indicators to measure absorbing liquid saturation is commonly required in federal rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR and 40 CFR Part 63, Subpart G.</p>	

Unit/Group/Process Information	
ID No.: 83T8	
Control Device ID No.: 83S6	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-T8
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Flow rate.	
Minimum Frequency: Once per day.	
Averaging Period: n/a	
Deviation Limit: Minimum flow rate of 3.25 gpm when vent receiving vent gases.	
<p>Basis of CAM: These indicators are identified as the primary determinants of product recovery device operations. The key to control efficiency for an absorber is good contact between the exhaust gas and the absorbing liquid. Monitoring liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles. Monitoring specific gravity and liquid VOC concentration is appropriate for direct absorption to indicate absorbing liquid saturation. Also monitoring liquid VOC concentration can indicate whether or not the absorbing liquid is actually absorbing the VOC, which can indicate that the control device is working properly. Monitoring outlet gas temperature can indicate the amount of VOC from the gas stream that can be absorbed by the scrubbing liquid. As the temperature increases the vapor pressure and energy level of the gas stream increases, raising the energy level of the absorbed molecules. At higher energy levels the absorbed molecules may have sufficient energy to overcome the attraction of the absorbing liquid. Therefore, absorbing liquids capture more air contaminants at low temperatures. Temperature is a good indicator of proper operation of the absorber. Therefore, monitoring combinations of these indicators, such as: outlet gas temperature and liquid flow rate; outlet gas temperature and liquid supply pressure; outlet gas temperature and specific gravity; liquid flow rate and liquid VOC concentration; liquid supply pressure and liquid VOC concentration; liquid flow rate and gas flow rate and liquid VOC concentration; liquid flow rate and specific gravity; liquid supply pressure and specific gravity; and liquid flow rate and gas flow rate and specific gravity, will help identify any potential problems with the control device. Specifically monitoring the scrubbing liquid flow or supply pressure and temperature is commonly required by and consistent with the May 1995 TCEQ guidance entitled "New Source Review Technical Guidance Package for Chemical Sources - Absorption Units". Also monitoring indicators to measure absorbing liquid saturation is commonly required in federal rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR and 40 CFR Part 63, Subpart G.</p>	

Unit/Group/Process Information	
ID No.: 83T8	
Control Device ID No.: 83S6	Control Device Type: Absorber (Direct Absorption)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-T8
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Scrubber liquid temperature.	
Minimum Frequency: Once per day.	
Averaging Period: n/a	
Deviation Limit: Maximum temperature of 95°F for the absorbing liquid shall be recorded once per day.	
<p>Basis of CAM: These indicators are identified as the primary determinants of product recovery device operations. The key to control efficiency for an absorber is good contact between the exhaust gas and the absorbing liquid. Monitoring liquid flow rate, liquid supply pressure, and the liquid flow rate and gas flow rate are provided as monitoring options because monitoring these parameters can indicate malfunctions in the liquid pumping equipment, blockage of pipes or spray nozzles. Monitoring specific gravity and liquid VOC concentration is appropriate for direct absorption to indicate absorbing liquid saturation. Also monitoring liquid VOC concentration can indicate whether or not the absorbing liquid is actually absorbing the VOC, which can indicate that the control device is working properly. Monitoring outlet gas temperature can indicate the amount of VOC from the gas stream that can be absorbed by the scrubbing liquid. As the temperature increases the vapor pressure and energy level of the gas stream increases, raising the energy level of the absorbed molecules. At higher energy levels the absorbed molecules may have sufficient energy to overcome the attraction of the absorbing liquid. Therefore, absorbing liquids capture more air contaminants at low temperatures. Temperature is a good indicator of proper operation of the absorber. Therefore, monitoring combinations of these indicators, such as: outlet gas temperature and liquid flow rate; outlet gas temperature and liquid supply pressure; outlet gas temperature and specific gravity; liquid flow rate and liquid VOC concentration; liquid supply pressure and liquid VOC concentration; liquid flow rate and gas flow rate and liquid VOC concentration; liquid flow rate and specific gravity; liquid supply pressure and specific gravity; and liquid flow rate and gas flow rate and specific gravity, will help identify any potential problems with the control device. Specifically monitoring the scrubbing liquid flow or supply pressure and temperature is commonly required by and consistent with the May 1995 TCEQ guidance entitled "New Source Review Technical Guidance Package for Chemical Sources - Absorption Units". Also monitoring indicators to measure absorbing liquid saturation is commonly required in federal rules, including: 40 CFR Part 60, Subparts III, NNN, and RRR and 40 CFR Part 63, Subpart G.</p>	

## Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on 09/24/2014.
2. The compliance history review evaluated the period from 04/28/2014 to 04/29/2009.

Site rating: 14.31

Company rating: 14.31

(High < 0.10; Satisfactory > 0.10 and < 55; Unsatisfactory > 55)

3. Has the permit changed on the basis of the compliance history or site/company rating? .....No

## Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS? .....No
2. Is a compliance plan and schedule included in the permit?.....No

## Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes  
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes  
OP-UA3 - Storage Tank/Vessel Attributes  
OP-UA4 - Loading/Unloading Operations Attributes  
OP-UA5 - Process Heater/Furnace Attributes  
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes  
OP-UA7 - Flare Attributes  
OP-UA8 - Coal Preparation Plant Attributes  
OP-UA9 - Nonmetallic Mineral Process Plant Attributes  
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes  
OP-UA11 - Stationary Turbine Attributes  
OP-UA12 - Fugitive Emission Unit Attributes  
OP-UA13 - Industrial Process Cooling Tower Attributes  
OP-UA14 - Water Separator Attributes  
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes  
OP-UA16 - Solvent Degreasing Machine Attributes  
OP-UA17 - Distillation Unit Attributes  
OP-UA18 - Surface Coating Operations Attributes  
OP-UA19 - Wastewater Unit Attributes  
OP-UA20 - Asphalt Operations Attributes  
OP-UA21 - Grain Elevator Attributes  
OP-UA22 - Printing Attributes  
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes  
OP-UA25 - Synthetic Fiber Production Attributes  
OP-UA26 - Electroplating and Anodizing Unit Attributes  
OP-UA27 - Nitric Acid Manufacturing Attributes  
OP-UA28 - Polymer Manufacturing Attributes  
OP-UA29 - Glass Manufacturing Unit Attributes  
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes  
OP-UA31 - Lead Smelting Attributes  
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes  
OP-UA33 - Metallic Mineral Processing Plant Attributes  
OP-UA34 - Pharmaceutical Manufacturing  
OP-UA35 - Incinerator Attributes  
OP-UA36 - Steel Plant Unit Attributes  
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes  
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes  
OP-UA39 - Sterilization Source Attributes  
OP-UA40 - Ferroalloy Production Facility Attributes  
OP-UA41 - Dry Cleaning Facility Attributes

OP-UA42 - Phosphate Fertilizer Manufacturing Attributes  
OP-UA43 - Sulfuric Acid Production Attributes  
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes  
OP-UA45 - Surface Impoundment Attributes  
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes  
OP-UA47 - Ship Building and Ship Repair Unit Attributes  
OP-UA48 - Air Oxidation Unit Process Attributes  
OP-UA49 - Vacuum-Producing System Attributes  
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes  
OP-UA51 - Dryer/Kiln/Oven Attributes  
OP-UA52 - Closed Vent Systems and Control Devices  
OP-UA53 - Beryllium Processing Attributes  
OP-UA54 - Mercury Chlor-Alkali Cell Attributes  
OP-UA55 - Transfer System Attributes  
OP-UA56 - Vinyl Chloride Process Attributes  
OP-UA57 - Cleaning/Depainting Operation Attributes  
OP-UA58 - Treatment Process Attributes  
OP-UA59 - Coke By-Product Recovery Plant Attributes  
OP-UA60 - Chemical Manufacturing Process Unit Attributes  
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes  
OP-UA62 - Glycol Dehydration Unit Attributes  
OP-UA63 - Vegetable Oil Production Attributes